

b.) Amendments to the Claims

1-20. (Cancelled)

21. (Currently Amended) A process for producing a uridine ~~diphosphate~~ diphosphate sugar, which comprises:

selecting as an enzyme ~~sources~~ source a yeast cell selected from the group consisting of *Saccharomyces* and *Kluyveromyces* or a treated product thereof, said yeast or treated product thereof being capable of producing a uridine diphosphate sugar from a nucleotide precursor selected from the group consisting of orotic acid, uracil, orotidine and uridine, and a sugar;

carrying out an ~~enzyme~~ enzymatic reaction in an aqueous medium containing the enzyme ~~sources~~, source, the nucleotide precursor and the sugar to form and accumulate the uridine diphosphate sugar in the aqueous medium; and

recovering the uridine diphosphate sugar from a supernatant of the aqueous ~~medium~~; medium.

wherein said treated product is a dried product of the cells, a freeze-dried product of the cells, a surfactant-treated product of the cells, an ultrasonic-treated product of the cells, a mechanically disrupted product of the cells, a solvent-treated product of the cells, an enzyme-treated product of the cells, a protein fraction of the cells, an immobilized product of the cells, or an enzyme preparation obtained by extraction from the cells.

22. (Currently Amended) A process for producing a complex carbohydrate, which comprises:

selecting as a first enzyme source, a yeast cell ~~or a treated product thereof~~ selected from the group consisting of *Saccharomyces* and *Kluyveromyces* ~~or a treated product thereof~~, said yeast ~~or treated product thereof~~ being capable of producing a uridine diphosphate sugar from a nucleotide precursor selected from the group consisting of orotic acid, uracil, orotidine and uridine, and a sugar;

carrying out an ~~enzyme~~ enzymatic reaction in a first aqueous medium containing the first enzyme source, the nucleotide precursor and the sugar to form and accumulate the uridine diphosphate sugar in the first aqueous medium;

recovering the uridine diphosphate sugar from ~~a supernatant of the~~ first aqueous medium;

selecting as a second enzyme source, a microorganism or an animal cell line or a treated product thereof, said microorganism, animal cell line or treated product thereof being capable of producing a complex carbohydrate from the uridine diphosphate ~~compound~~ sugar and a precursor of a complex carbohydrate selected from the group consisting of monosaccharides, oligosaccharides, proteins, peptides, glycoproteins, glycolipids and glycopeptides ~~or a treated product thereof~~;

carrying out an ~~enzyme~~ enzymatic reaction in ~~the first or~~ a second aqueous medium containing the second enzyme source, the precursor of complex carbohydrate and the uridine diphosphate sugar to form and accumulate the complex carbohydrate ~~in the first or second aqueous medium, and carbohydrate; and~~

recovering the complex carbohydrate from the ~~first or second~~ aqueous ~~medium: medium,~~

wherein said treated product is a dried product of the cells, a freeze-dried product of the cells, a surfactant-treated product of the cells, an ultrasonic-treated product of the cells, a mechanically disrupted product of the cells, a solvent-treated product of the cells, an enzyme-treated product of the cells, a protein

fraction of the cells, an immobilized product of the cells, or an enzyme preparation obtained by extraction from the cells.

Claim 23. (Cancelled)

24. (Currently Amended) The process according to ~~either of claims 21 and 22~~ claim 21 or 22, wherein the uridine diphosphate sugar is selected from the group consisting of uridine-diphosphate glucose, uridine-diphosphate galactose, uridine-diphosphate N-acetylglucosamine and uridine-diphosphate N-acetylgalactosamine.

25. (Currently Amended) The process according to ~~either of claims 21 and 22~~ claim 21 or 22, wherein the sugar is a sugar selected from glucose, galactose, glucosamine, N-acetylglucosamine and N-acetylgalactosamine.

26. (Currently Amended) The process according to claim 22, wherein the precursor of a complex carbohydrate is N-acetylglucosamine or N-acetylglucosamine β 1-3galactose β 1-4 glucose.

27. (Previously Presented) The process according to claim 22, wherein the complex carbohydrate is a glucose-containing complex carbohydrate, a N-acetylglucosamine-containing complex carbohydrate, a galactose-containing complex carbohydrate, or a N-acetylgalactosamine-containing complex carbohydrate.

28. (Previously Presented) The process according to claim 27, wherein the galactose-containing complex carbohydrate is a complex carbohydrate selected from lacto-N-tetraose and lacto--neotetraose.

29. (Currently Amended) The process according to claim 22, wherein the microorganism capable of producing a complex carbohydrate from ~~a sugar nucleotide~~ the uridine diphosphate sugar and a precursor of a complex carbohydrate ~~precursor~~ is a recombinant *Escherichia coli* or *Saccharomyces cerevisiae*.

30. (Currently Amended) The process according to claim 22, wherein the animal cell line capable of producing a complex carbohydrate from ~~a sugar nucleotide~~ the uridine diphosphate sugar and a precursor of a complex carbohydrate ~~precursor~~ is recombinant COS-7 cell or namalwa KJM-1 cell.

31. (Currently Amended) The process according to claim 30, wherein the animal cell line is transformed with a plasmid comprising DNA encoding β 1,3-galactosyltransferase.

32. (Previously Presented) The process according to claim 31, wherein the DNA encoding β 1,3-galactosyltransferase is derived from human melanoma cell line WM266-4.

33. (Currently Amended) The process according to claim 31, wherein the animal cell line is namalwa KJM-1/pAMoERSAW1.